Bachelor of Science in Geospatial Information Sciences

Geospatial information sciences (GIS) harness groundbreaking technologies for Spatial Big Data Analytics that make location and interaction key to our understanding of social and environmental dynamics. GIS graduates will master the knowledge and skills to spatially integrate data and computing resources for informed decision making in environmental modeling, business intelligence, precision agriculture, smart cities, public safety, and community resilience, just to name a few.

Recent technological innovations have greatly enhanced our ability to collect and analyze massive environmental, social, and economic data about places as well as location data about individuals. Now more than ever before, unmanned aviation vehicles (UAV) equipped remote sensors provide near-real time imagery for search, rescue and damage assessment after a disaster. Lidar point clouds enable us to build high resolution 3D models of buildings, trees, and terrains. Location-based services and mobile geospatial apps allow us to search information based on proximity to our locations (e.g. find nearby restaurants) and connect our social networks in both physical and cyber spaces (e.g. Foursquare checkins).

From Microsoft and Apple to Google, and from the United Nations to indigenous communities, geospatial information science and technologies play an essential role for social-environmental inventory, planning, and forecasting of food, water, energy and health. These technologies include geographic information systems (GIS), the Global Positioning System (GPS) and satellite-based remote sensing. They penetrate virtually every aspect of our lives, from digital maps in cars to the maintenance of city infrastructure, regional agriculture and forest lands.

GIS has revolutionized traditional disciplines such as geography and inspired scientists from a broad range of fields to combine efforts on leading-edge research.

Careers in Geospatial Information Sciences
GIS graduates will encounter a wide variety of career options, as businesses and governments race to take advantage of technological advances. If they wish to enter the public sector, they may work in areas such as public administration and policy analysis; public safety, criminology and emergency preparedness management; geospatial intelligence; environmental management; or urban, regional, social service and transportation planning. Businesses also recruit GIS graduates, especially companies focused on marketing, site selection, logistics, real estate and resource exploration (including petroleum) among others.

Students who graduate with a BS may move on to graduate school, perhaps entering UT Dallas’ highly regarded MS or PhD geospatial programs, which were recently ranked among the top five in the nation. The University’s Career Center is an important resource for students pursuing their career. Licensed counselors are available to provide strategies for mastering job interviews, writing professional cover letters and resumes and help students connect with campus recruiters, among other services.

Geospatial Information Sciences at UT Dallas
The general BS degree requires 120 hours to graduate: 42 hours from the University’s core curriculum, 42 hours from the major, and 36 semester credit hours of electives.

Fast-Track
The Fast Track program enables exceptionally gifted UT Dallas students to include master’s level courses in their undergraduate degree plans. Students who meet the requirements for admission to graduate school and the minimum GPA requirement for their major can take up to 15 hours of graduate level coursework that can apply toward their undergraduate and graduate level coursework. To take graduate courses in the Fast Track program upper-division undergraduates must have completed 90 semester credit hours and petition their associate dean for permission to take graduate courses.
School of Economic, Political and Policy Sciences (EPPS)

Every new generation inherits a world more complex than that of its predecessors, which prompts a need for new thinking about public policies that impact people’s daily lives. In the School of Economic, Political and Policy Sciences (EPPS), we examine the implications of innovation and change for individuals and communities. The social sciences are where the world turns to for answers to the important issues of today and the future such as education and health policy, financial crises, globalization, policing, political polarization, public management, terrorism, and the application of geographical information sciences to study social, economic and environmental issues.

As an undergraduate in EPPS, you will have the opportunity to work with professors who are probing issues that will affect your future. You will develop the vital skills you need to thrive in a rapidly evolving, highly competitive job market. EPPS will prepare you for careers in government, non-profits and the private sector that enable you to make a real difference in the world of today and tomorrow.

EPPS is at the forefront of leadership, ethics and innovation in the public and nonprofit sectors. Our students and faculty look forward to new opportunities to study and address the complex and evolving issues of the future.

Research informs much of the instruction. The school has six centers of excellence:

- Center for Crime and Justice Studies
- Center for Global Collective Action
- Center for Geospatial Research and Global Health Policy
- Institute for Urban Policy Research
- Texas Schools Project
- The Negotiations Center

Degrees Offered

**Bachelor of Science and Bachelor of Arts:** Criminology, economics, geospatial information sciences, international political economy, political science, public affairs, public policy, sociology

**Master of Science:** Applied sociology, criminology, economics, geospatial information sciences, international political economy, justice administration and leadership, social data analytics and research

**Master of Arts:** Political science, political science-constitutional law studies, political science-legislative studies

**Master of Public Affairs:** Public affairs

**Master of Public Policy:** Public policy

**Doctor of Philosophy:** Criminology, economics, geospatial information sciences, political science, public affairs, public policy and political economy

Certificates

- Economic and Demographic Data Analysis
- Geographic Information Systems (GIS)
- Geospatial Intelligence
- Local Government Management
- Nonprofit Management
- Program Evaluation
- Remote Sensing

Contact Information

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